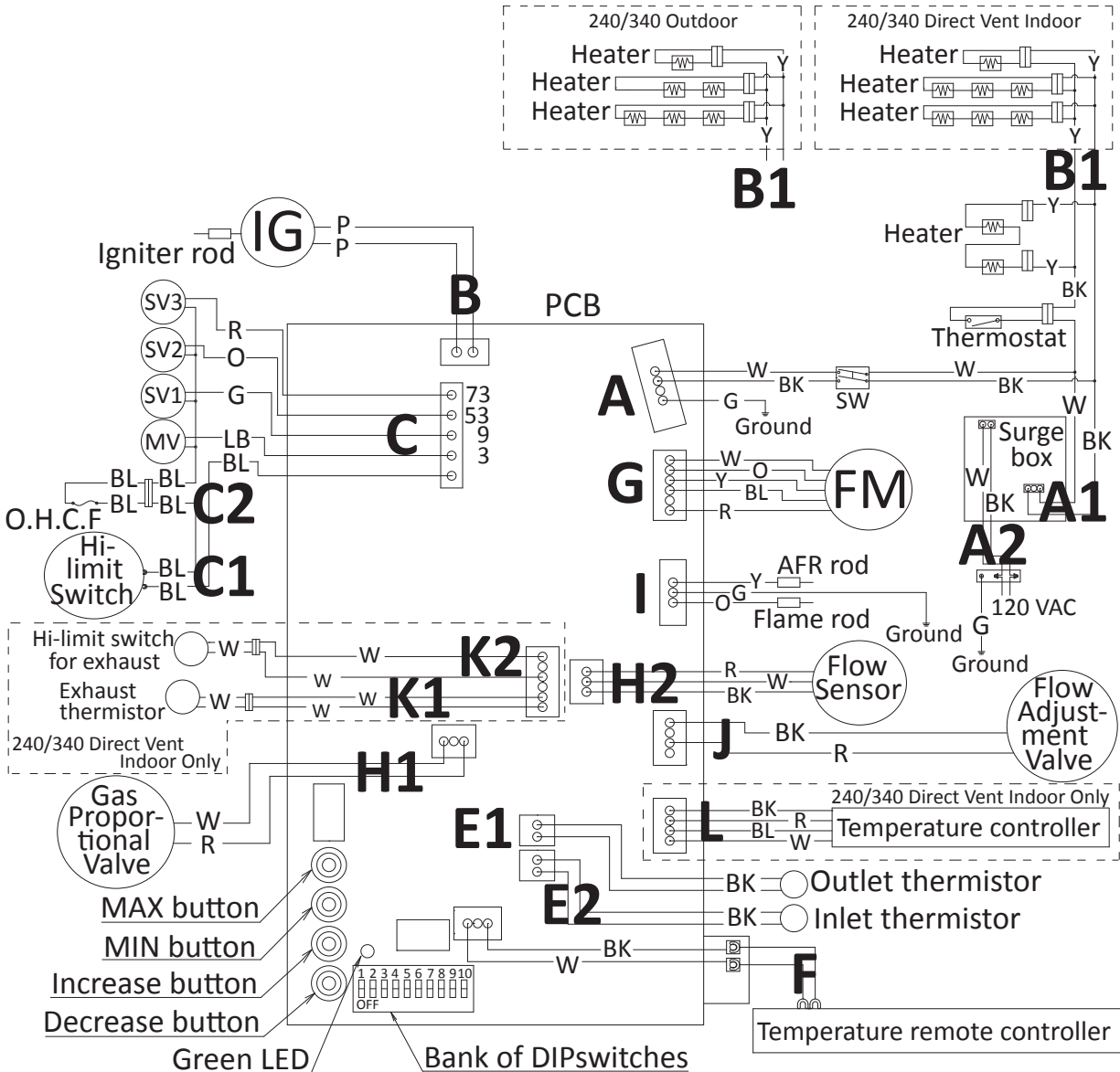


6. Wiring diagram

240 (T-H3J) models / 340 (T-H3S) models

W: WHITE BK: BLACK LB: LIGHT BLUE
 R: RED BL: BLUE Y: YELLOW
 G: GREEN O: ORANGE BR: BROWN P: PURPLE



7. Wiring diagram check points for diagnosis

The table below applies to both the the Direct Vent Indoor models and Outdoor models.

| Check-point | Part and Description | Color of wires | Normal range |
|-------------|---|-------------------------------|--|
| A | 120V Power supply | White – Black | 108 to 132 VAC |
| A1, A2 | 120V Power supply | Black - White | 108 to 132 VAC |
| B | Igniter | Purple - Purple | 108 to 132 VAC |
| B1 | Heater | Yellow - Yellow | 108 to 132 VAC |
| C | Gas valves | Light blue - blue at COM (MV) | 93 to 120 VDC (during operation) / 1.35 to 1.65 k Ω |
| | | Green - blue at COM (SV1) | 93 to 120 VDC (during operation) / 1.35 to 1.65 k Ω |
| | | Orange - blue at COM (SV2) | 93 to 120 VDC (during operation) / 1.35 to 1.65 k Ω |
| | | Red - blue at COM (SV3) | 93 to 120 VDC (during operation) / 2.07 to 2.53 k Ω |
| C1 | Hi-limit switch | Blue - Blue | Less than 1 VDC and less than 1.0 Ω |
| C2 | Overheat cutoff fuse | Blue - Blue | Less than 1 VDC and less than 1.0 Ω |
| D1, D2 | Easy-link connectors 540 (T-H3) models only | Black - White | 15 VDC (during Easy-link operation) |
| E1 | Outlet thermistor | Black - Black | See table on p. 18 |
| E2 | Inlet thermistor | Black - Black | |
| E3 | Heat exchanger thermistor 540 (T-H3) models only | Black - Black | See table on p. 19 |

| Check-point | Part and Description | Color of wires | Normal range |
|-------------|--|---|--|
| F | Remote controller | White – Black | 11 to 25 VDC |
| G | Fan motor | Red - Blue | 132 to 192 VDC |
| | | Yellow - Blue | 13 to 17 VDC |
| | | Orange - Blue | 2.0 to 6.5 VDC |
| H1 | Gas proportional valve | White - red | 1.0 to 15 VDC (during operation) and 20 to 40 Ω |
| H2 | Flow sensor | Red - Black | 4.0 to 5.5 VDC |
| | | White - Black | 1.0 to 4.0 VDC (pulse) 1,080 pulse / min (more than 18 Hz) |
| I | Air-fuel ratio rod | Yellow - AFR rod (Between the AFR rod and the computer board) | More than 1 μA (during operation) |
| | Flame rod | Orange - Flame rod (Between the flame rod and the computer board) | More than 1 μA (during operation) |
| J | Flow adjustment valve | Red - Black | 7.0 to 16 VDC and 0.09 to 0.2 kΩ |
| J1 | Bypass valve 540 (T-H3) models only | Brown - Red | 3.0 to 11 VDC and 50 to 85 Ω |
| K1 | Exhaust thermistor | White - White | See table on p. 19 |
| K2 | Hi-limit switch for exhaust | White - White | Less than 1 VDC and less than 1.0 Ω |
| L | Temperature controller | White – Black | 11 to 25 VDC |